REGULATORY UPDATE 2022 PIPELINE SAFETY SEMINAR DECEMBER 6, 2022 MONTGOMERY, ALABAMA

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2022 PHMSA Items:

- Frequently Asked Questions (FAQs): Operator Qualifications
 - **This Section was added to help give better guidance for Operators OQ programs.**
- DOT-OST-2021-0093 Procedures for Transportation Workplace Drug and Alcohol Testing Program: Addition of Oral Fluid Specimen Testing for Drugs
 - This rulemaking would conform DOT's regulations to recent changes the U.S. Department of Health and Human Services made to the Oral Fluids Mandatory Guidelines by providing DOT-regulated employers with the option of collecting an oral fluid specimen in lieu of a urine specimen when testing for drugs as required by the DOT drug testing regulations.

2022 PHMSA Items:

PHMSA 01-22 Requirements for Pipeline Shut-off Valves

- (PHMSA) announced a new rule to help improve pipeline safety, reduce super-polluting methane emissions, and protect the public by requiring the installation of remotely controlled or automatic shut-off valves, or alternative equivalent technologies, on new and replaced onshore natural gas, carbon dioxide, and other hazardous liquid pipelines.
- The final rule also requires operators to ensure their emergency response plans contain written procedures for timely identification and mitigation of ruptures on their systems, as well as to include procedures for engaging public safety officials (such as 9-1-1 call centers and fire, police, and other first responders).

2022 PHMSA Items:

❖ AB - PHMSA-2022-0063 Pipeline Safety: Potential for Damage to Pipeline Facilities Caused by Earth Movement and Other Geological Hazards

PHMSA is issuing this updated advisory bulletin to remind owners and operators of gas and hazardous liquid pipelines, including supercritical carbon dioxide pipelines, of the potential for damage to those pipeline facilities caused by earth movement in variable, steep, and rugged terrain and terrain with varied or changing subsurface geological conditions. Additionally, changing weather patterns due to climate change, including increased rainfall and higher temperatures, may impact soil stability in areas that have historically been stable.

Gas Rule: Split into 3 separate regulations:

"RIN 1" - Safety of Gas Transmission Pipelines: MAOP Reconfirmation, Expansion of Assessment Requirements, and Other Related Amendments - Final Rule Published October 1, 2019 "RIN 2" - Repair Criteria, IM Improvements, Cathodic Protection, Management of Changes, and Other Related Amendments

Summary of Changes to Definitions §192.3

* Amends the definition of "transmission line."

- > Transmission lines can be a "connected series of pipelines."
- ➤ Has MAOP of 20% or more of SMYS (previously defined as operating at hoop stress of 20% or more of SMYS).
- > Transmission lines can be voluntarily designated by the operator.

* Adds a new definition for "distribution center."

➤ Initial point where gas enters piping used primarily to deliver gas to customers who purchase it for consumption, as opposed to customers who purchase it for resale (metering location / pressure reduction location / lateral off a transmission line).

Summary of Changes to Definitions §192.3

*Adds new definitions for:

- Close Interval Survey
- > Dry Gas or Dry Natural Gas
- > Hard Spot
- ➤ In-line Inspection
- ➤ In-line Inspection Tool or Instrumented Internal Inspection Device
- > Wrinkle Bend
- **❖** The definitions clarify technical terms used in part 192 or in this rulemaking.

Summary of Changes to Corrosion Control§§192.319, 192.461, 192.465, 192.473, 192.478, & 192.935

- **External corrosion control**—Interference currents (192.473)
 - ➤ Specifies interference survey requirements in an operator's corrosion control program.
 - Requires interference surveys when potential monitoring indicates significant increase in stray current or when new potential stray current sources (pipelines, HVAC power lines, etc.) are introduced.
 - Analysis of results of survey to determine cause of interference and whether it could cause significant corrosion, impede safe operation, or adversely affect environment or public.
 - Development of remedial action plan and remediation within 12 to 15 months after completing survey.

Summary of Changes to Corrosion Control§§192.319, 192.461, 192.465, 192.473, 192.478, & 192.935

- Internal corrosion control –Onshore transmission monitoring and mitigation (192.478)
 - Requires operators of GT pipelines with corrosive constituents in the gas to monitor for gas quality, evaluate gas monitoring data yearly, and evaluate IC monitoring and mitigation program yearly.
- What additional Preventive & Mitigative (P&M) measures must an operator take? (192.935)
 - Adds additional considerations for P&M measures to address corrosion in HCAs, including recoating damaged, poorly performing, or disbonded coatings.

Summary of Changes to Inspections Following Extreme Events -§192.613

- * Requires operators to perform inspections of all potentially affected onshore GT pipeline facilities after events that have the likelihood of damaging pipeline facilities and taking appropriate remedial action.
 - Inspection must commence within 72 hours after the point in time when the operator reasonably determines the affected area can be safely accessed by personnel and equipment, and such personnel and equipment are available. If unable, must notify PHMSA Region Director as soon as practicable.

Summary of Changes to Repair Criteria§§192.714 & 192.933

- *Establishes repair criteria and pressure reductions for non-HCAs that are structured similarly to the criteria for HCAs (immediate/2-year/monitored conditions).
 - > Prescribes requirements, including in-situ evaluation, for cracks and crack-like defects.
 - Establishes an Engineering Critical Assessment (ECA) method for dents where the repair can be deferred if engineering analyses performed in accordance with §192.712 demonstrate critical strain levels are not exceeded.
 - > Updates or specifies certain HCA repair criteria.
 - Repairs must be made using pipe and material properties documented in TVC records; if documented data is not available, operators must verify per §192.607.

Summary of Changes to Repair Criteria§§192.714 & 192.933

Designates the following types of defects as immediate conditions:

- > Anomalies where the metal loss is greater than 80 percent of wall thickness.
- \triangleright Metal loss anomalies with a PFP \leq 1.1 x MAOP.
- ➤ A topside dent that has metal loss, cracking, or a stress riser ("unless" ECA in accordance w/§192.712).
- Anomalies where there is an indication of metal loss affecting certain longitudinal seams.
- > Cracks or crack-like anomalies meeting specified criteria.
- Indications of anomalies that require immediate action.

Summary of Changes to Repair Criteria§§192.714 & 192.933

❖ Designates the following types of defects as 1-year / 2-year conditions:

- > Smooth topside dents with a depth greater than 6% of the pipeline diameter ("unless" ECA [...]).
- Dents greater than 2% of the pipeline diameter located at a girth weld, longitudinal, or spiral seam weld ("unless" ECA [...]).
- > Bottom side dent with metal loss, cracking, or stress riser ("unless" ECA).
- Metal loss anomalies where a calculation of the remaining strength of the pipe shows a PFP ratio $\leq 1.39 \times MAOP$ for Class 2 locations, and $\leq 1.50 \times MAOP$ for Class 3 and Class 4 locations. For Class 1 locations with a PFP > 1.1 x MAOP, follow B31.8S, section 7, figure 4.
- ➤ Certain metal loss anomalies and cracks with a PFP < 1.39 x MAOP in Class I locations or where Class 2 locations have uprated pipe, and that has a PFP < 1.5 x MAOP in all other Class 2, Class 3, and Class 4 locations.

Summary of Changes to Repair Criteria§§192.714 & 192.933

Designates the following types of defects as monitored conditions:

- ➤ Bottom side dents with depth greater than 6% (192.714)and where ECA shows critical strain levels are not exceeded (192.933).
- ➤ Dents with depth greater than 2% that affects pipe curvature at a girth weld or longitudinal or helical seam weld, and "where" ECA [...].
- > Dents with metal loss, cracking, or a stress riser, and "where" ECA [...].
- Certain metal loss anomalies and cracks with a PFP ≥ 1.39 x MAOP in Class I locations or where Class 2 locations have uprated pipe, and that has a PFP ≥ 1.5 x MAOP in all other Class 2, Class 3, and Class 4 locations.

Summary of Changes to IM Clarifications §§192.917 (a) –(d) & 192.935(c)

- Inserts specific attributes from ASME/ANSI B31.8S into the regulations for risk assessments.
- Specifies operators must perform risk assessments that are adequate for evaluating the effects of interacting threats. Account and compensate for uncertainties in the model and data used.
- Requires operators use validated information and data as inputs and validate their risk models considering incident, leak, and failure history, and other historical information.
- > Provides specific examples of integrity threats for plastic pipe that must be addressed.

Summary of Changes to ICDA and SCCDA §§192.923, 192.927, & 192.929

- ➤ Incorporates NACE SP0206-2006 into the regulations for ICDA and establishes additional requirements for ICDA for covered segments.
- ➤ Incorporates NACE SP0204-2008 into the regulations for SCCDA and establishes additional requirements for SCCDA.

- Final Rule released on November 15, 2021
 - Effective Date of May 16, 2022
 - Two new types of Gathering lines are defined in §§191.3 and 192.8
 - ❖ A "Type C Gathering Line" is a line that operates above 20% SMYS (or > 125 psig for non-metallic lines or when SMYS is unknown), located in a Class 1 location, and is greater than 8 5/8" in diameter. It would be a Type A Gathering line if it was in a Class 2 through 4 location.
 - A "Type R Gathering Line" is any other definitional Gathering line that isn't Type A, B, or C. These lines are subject to some reporting requirements in Part 191 now, but nothing in Part 192. The logic is PHMSA is getting information on the safety risks associated with these lines to see if future regulation is necessary or not.

All Gathering lines are now subject to Annual Reporting, Incident Reporting, and Safety Related Condition reporting. They do not have to submit data to the National Pipeline Mapping System though. Part 191 requirements become effective on the effective date of the rule (May 16, 2022).

PHMSA added language governing "incidental gathering" as defined in RP80. For any new, replaced, relocated, or otherwise changed gathering pipe installed after the effective date of the rule-pipe cannot be classified as "incidental gathering" if the pipeline terminates 10 or more miles downstream from the furthermost downstream endpoint as defined in Section 2.2 or RP80. If the segment is longer than 10 miles the line must be classified as Transmission.

Operators must have records describing the methodology by which they determined the beginning and end point of their Gathering system and keep them for the life of the pipeline. This has to be done within 6 months of the rule's effective date. There is also some language about how operators need a "safety buffer" for Type B gathering in Class 2 locations.

Design and testing of a new, replaced, relocated, or otherwise changed Type C gathering line has to be done by following Subparts B through G and Subpart J of the Regulations.

Type C lines must follow Subpart I Corrosion as if they were Transmission lines, except for 192.493 which covers ILI.

Type C lines must have and follow a damage prevention, public awareness, and emergency response plan.

Type C lines must perform leak surveys and are subject to the line marker requirements for transmission lines.

Operators of Type C lines have one year after the effective date of the rule to start complying

Type C lines with a diameter above 12.75" have to establish a MAOP. If the line is 16" or less, they don't have to do it if the line is located within a potential impact circle or not in a class location unit with "an occupied building or other impacted site". If a line segment of 40 feet or less is repaired, replaced, etc. the MAOP requirement doesn't apply.

The rule clarifies that 192.150 Passage of Internal Inspection devices does not apply to gathering lines.

The rule defines composite materials and spells out what information operators have to provide to PHMSA if they install new or replacement composite pipe. The rule says operators have to notify PHMSA (or state) 90 days before installing and PHMSA has 90 days to review and tell the operator to stop if they don't like it, otherwise the operator automatically has approval. Composites will likely be addressed in a future rulemaking.

December 15 deadline for "Petitions for Reconsideration"

- ❖ Final Rule Effective Date: May 16, 2022
- Reporting
 - > Incident reports: Report events occurring after May 16, 2022
 - Annual reports: 2022 reports due March 2023
- ❖ Identify Type C lines: November 16, 2022
- Section 192.9 compliance: May 16, 2023
- ❖ Section 192.9 compliance for lines that become Type C after May 16, 2022: 1 year from date they become Type C lines
- * MAOP lookback: 5-year period ending May 16, 2023
- Enforcement discretion
 - ➤ <u>Incidental gathering lines constraints: constructed after May 16, 2022</u>
 - ➤ Part 192 requirements for Type C pipelines ≤12.75": May 17, 2024

PHMSA updated these forms on January 6, 2022:

- Drug Alcohol IA Question Set
- Gas Distribution IA Question Set
- Gas Transmission IA Question Set
- ·Hazardous Liquid IA Question Set
- LNG IA Question Set
- Underground Natural Gas Storage IA Question
 Set

PHMSA/NAPSR News of Interest to States:

- Section 114 of Pipes Act possible implementation inspection in 2023 or beyond. Information from 2022 inspection will be reviewed.
- Biogas Is being looked closely as more bio reactors, and landfill methane capture is being used.
- ➤ Inspection intervals some inspections might be done sooner due to PHMSA language.

Damage Reporting:

37-15-9(c) of the Alabama Code - "If an event damages any pipe, cable or its protective covering, or other underground facility, or there is a significant near miss that could have resulted in damage, the operator receiving the notice shall file a report with the "One-Call Notification System". Reports must be submitted annually to the System, no later than March 31 for the prior calendar year..."

Plastic Fusion Qualifications:

You only need to qualify once each year; if you have qualified less than 10 months prior to attending a class, you will **NOT** receive your certificate.

You must check all information on the qualification form. Names, social security numbers, birthdates, MUST match what we have on previous forms. If not, you will **NOT** receive your certificate.

PSC	
Certification #	

Alabama Public Service Commission Gas Pipeline Safety Plastic Fusion Qualification Form

Revision 11-5-17

Please Complete all the Personal, Class and Company Information Below

Personal Information							Class Information		
Name			Click or tap here to enter text.			Date		Click or tap here to enter text.	
Signature					Class Loca	ation	Click or tap here to enter text.		
Home ⁻	Teleph	one	Click or tap here to enter text.				Company Information		
Addres	Click	Click or tap here to enter text.					Click or tap here to enter text.		
City	Click	or ta	r tap here to enter text.				phone Click or tap here to enter text.		
State	Click	or ta	ap here to	Zip	Click or tap here to enter	Address	Click	or tap here to enter text.	
Date of Birth Click or tap here to enter text.					ter text.	City	Click or tap here to enter text.		
You Must Provide The Last 4 Digits of Your Social Security Number					r Social Security Number	State	Click or tap here to enter text.		
SSN	SSN XXX-XX- Click or tap here to enter text.								

Additional Resources and Tools

PHMSA Homepage, Office of Pipeline Safety www.phmsa.dot.gov

Standards & Rulemaking

http://www.phmsa.dot.gov/pipeline/regs

PHMSA Technical Resources

https://www.phmsa.dot.gov/technical-resources/pipeline/pipeline-technical-resources-overview

GPAC Meeting slides for reference at "Public Meetings" tab (https://primis.phmsa.dot.gov/meetings/)

PHMSA's Stakeholder Communications Site

http://primis.phmsa.dot.gov/com

For Federal Regulations (Official Version)

www.ecfr.gov



QUESTIONS?